## Goose Haven Energy Center, LLC

3853 Goose Haven Road Suisun City, CA 94585

May 30, 2017

Director of Compliance and Enforcement Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105

Attn: Title V

Subject: Goose Haven Energy Center, LLC

**Title V Semi-Annual Monitoring Report** 

Facility # B4416

Reporting Period: November 1, 2016 – April 30, 2017

To Whom It May Concern:

Enclosed is the Title V CEMS Semi-Annual Monitoring Report for the Goose Haven Energy Center ("GHEC") for the reporting period from November 1, 2016 – April 30, 2017.

GHEC is currently in compliance with the District CEMS regulations. On April 5, 2017, the GHEC experience a malfunction of the NOx analyzer, this event caused erroneous emissions values to be recorded while the plant was operating and resulted in an indicated exceedance of the facility's daily mass emission limit for NOx. Further review of the data indicated that the plant operated in compliance with all applicable emissions limits during the time the NOx analyzer malfunction occurred. GHEC maintained compliance with the monitoring requirements listed in the Title V permit for GHEC during this reporting period.

By signing this report I am certifying that based on information and belief formed after reasonable inquiry, the statements and information in the attached report are true, accurate, and complete.

If you have any questions or require additional information, please contact me at (707) 399-4393.

Sincerely,

Andrew Gundershaug

Plant Manager and Designated Representative/Responsible Official

## Table VII – A Applicable Limits and Compliance Monitoring Requirements S-1 – COMBUSTION GAS TURBINE November 1, 2016 through April 30, 2017

Eimit  BAAQMD 9-9-301.1.3  BAAQMD 9-9-301.1.3	N N	Effective Date	9 ppmv @ 15% O2, dry  9 ppmv @ 15% O2, dry	Requirement Citation  BAAQMD 9-9-501 and BAAQMD condition #20057, part 23c  BAAQMD	Frequency (P/C/N) C	СЕМ	Yes	No
9-9-301.1.3 BAAQMD 9-9-301.1.3			O2, dry 9 ppmv @ 15%	and BAAQMD condition #20057, part 23c	С	СЕМ	· X	
9-9-301.1.3	N			BAAQMD				
i				condition #20057, part 24a	P/A	Source test every 8000 hrs of every 3 yrs, whichever comes first	Х	
9-9-301.2	N		.43 lbs/MW or 9 ppmv @ 15% O2, dry	BAAQMD 9-9-501 and BAAQMD Condition #20057 part 23c	С	СЕМ	Х	
SIP Regulation 9-9-301.3	Y		9ppmv @ 15% O2, dry	BAAQMD 9-9-501 and BAAQMD condition #20057, part 23c	С	СЕМ	X	
SIP Regulation 9-9-301.3	Y		9ppmv @ 15% O2, dry	BAAQMD condition #20057, part 24a	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	х	
NSPS, 40 CFR 60.332(a)(1)	Y		75ppmv @ 15% O2, dry	NSPS 40CFR 60.334(c)	С	СЕМ	х	
None	Y		None	40 CFR 75.10	С	СЕМ	x	
BAAQMD condition #20057, part 18.1	Y	1	2.5 ppm @15% O2, dry 3-hr rolling average except during turbine startup or	BAAQMD condition #20057, part 18.1	С	СЕМ	х	
6 I	Regulation 9-9-301.3 NSPS, 40 CFR 0.332(a)(1) None BAAQMD condition 20057, part	Regulation 9-9-301.3  NSPS, 40 Y CFR 0.332(a)(1) None Y BAAQMD Y condition 20057, part	Regulation 9-9-301.3  NSPS, 40 Y CFR 0.332(a)(1) None Y  BAAQMD Y condition 20057, part	NSPS, 40   Y   75ppmv @ 15%     O2, dry     O2, dry     O332(a)(1)     None   Y   None     O3AAQMD   Y   Condition     O4   CFR     O5   CFR     O2, dry     O5   CFR     O2, dry     O4   CFR     O5   CFR     O5   CFR     O6   CFR     O7   CFR     O8   CFR     O9   CFR     O15%     O2   CFR     O2   CFR     O3   CFR     O4   CFR     O5   CFR     O6   CFR     O7   CFR     O8   CFR     O9   CFR     O9   CFR     O15%     O2   CFR     O2   CFR     O3   CFR     O4   CFR     O5   CFR     O5   CFR     O6   CFR     O7   CFR     O7   CFR     O8   CFR     O9   CFR     O9   CFR     O9   CFR     O15%     O15%     O15%     O2   CFR     O3   CFR     O4   CFR     O5   CFR     O7   CFR     O8   CFR     O9   CFR	NSPS, 40	Regulation         O2, dry         condition #20057, part 24a           NSPS, 40         Y         75ppmv @ 15% O2, dry         NSPS 40CFR O2, dry         C           NSPS, 40         Y         None G0.334(c)         O2, dry         60.334(c)         O2           None         Y         None G15% None G2.5 ppm @15% O2, dry 3-hr rolling average except during turbine startup or         D2, dry 3-hr part 18.1         C	Regulation         O2, dry         condition #20057, part 24a         every 8000 hrs or every 3 yrs, whichever comes first           NSPS, 40 CFR CFR CFR CFR CFR O2, dry         NSPS 40CFR G0.334(c)         C CEM           None Y None SAAQMD Y Condition         Y CEM	Condition #20057, part 24a   Pa

Type of	Citation of	FE	Future		Monitoring	Monitoring	Monitoring	Comp	liance
Limit	Limit	Y/N	Effective Date	Limit	Requirement Citation	Frequency (P/C/N)	Туре	Yes	No
NOX	BAAQMD condition #20057, part 18.1	Y	·	2.5 ppm @15% O2, dry 3-hr average except during turbine startup or shutdown	BAAQMD condition #20057, part 24a	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	х	
NOx	BAAQMD condition #2057, part	Y		121 lb/ calendar day (as NO2)	BAAQMD condition #20057, part 23c	C	СЕМ	Х	
NOx	BAAQMD condition #20057, part	Y		16.4 tons per calendar year (as NO2)	BAAQMD condition #20057, part 23c	С	СЕМ	Х	
СО	BAAQMD condition #20057, part 18.3	Y		6 ppmv, @ 15% O2, dry, 3-hr average except during turbine startup or shutdown	BAAQMD condition #20057, parts 18.3 and 23c	С	СЕМ	X	
СО	BAAQMD condition #20057, part 18.3	Y	·	6 ppmv, @ 15% O2, dry, 3-hr average except during turbine startup or shutdown	BAAQMD condition #20057, part 24c	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	х	
со	BAAQMD condition #20057, part 21	Y		163 lb/ calendar day	BAAQMD condition #20057, part 23c	С	СЕМ	х	·
СО	BAAQMD condition #20057, part 21	Y		29.1 tons per calendar year	BAAQMD condition #20057, part 23c	С	СЕМ	X	
CO2		Y		None	40 CFR 75.10	С	CEM (CO2) or CEM (O2) or fuel flow monitor	х	

Type of	Citation of	FE	Future	Limit	Monitoring Requirement	Monitoring Frequency	Monitoring	Com	liance
Limit	Limit	Y/N	Effective Date	Limit	Citation	(P/C/N)	Туре	Yes	No
SO2	BAAQMD 9-1-301	Y .		GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 bours		N		Х	
SO2	9-1-302	Y		300 ppm (dry)	BAAQMD condition #20057, part 23e	P/Q	Total Sulfur analysis	Х	
SO2	NSPS 40 CFR 60.333(a)	Υ .		0.015% (vol) @ 15% O <sub>2</sub> (dry)	NSPS 40 CFR 60.334(h)(3)		Fuel Measurements, calculations	X	
SO2	None	<b>Y</b> .		None	40 CFR 75.11(d)(2), 40 CFR 75, Appendix D, part 2.3		Fuel measurements, calculations	X	
SO2	BAAQMD condition #20057, part	Y		1.39 lb/hr excluding startup and shutdown of turbines	BAAQMD condition #20057, part 23e	P/Q	Total sulfur content analysis	X	
SO2	BAAQMD condition #20057, part 18.6	Y		1.39 lb/hr excluding startup and shutdown of the turbines	BAAQMD condition #20057, part 24f	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	X	
SO2	BAAQMD condition #20057, part	Y		33 lb/ calendar day	BAAQMD condition #20057, part 23e	P/Q	Total sulfur analysis	Х	
SO2	BAAQMD condition #20057, part 21	<b>Y</b>		6.0 tons/ calendar year	BAAQMD condition #20057, part 23e	P/Q	Total sulfur analysis	х	
Opacity	BAAQMD 6-1-301	Ż -		>Ringelmann No.1 for no more than 3 minutes in any hour		N		Х	
Opacity	SIP 6-301	Y		>Ringelmann No.1 for no more than 3 minutes in any hour		N		х	

Type of	Citation of	FE	Future		Monitoring	Monitoring	Monitoring	Comp	liance
Limit	Limit	Y/N	Effective Date	Limit	Requirement Citation	Frequency . (P/C/N)	Туре	Yes	No
Opacity	BAAQMD condition #20057, part 17	Y		> Ringelmann No.1 for no more than 3 minutes in any hour or equivalent 20% opacity		N		X	
Filterable Particulate	BAAQMD 6-1-310	N		0.15 grains/dscf		N		Х	
Filterable Particulate	SIP 6-310	Y		0.15 grains/dscf		N		Х	
PM10	BAAQMD condition #20057, part 18.5	Y		3 lb/hr for S-1	BAAQMD condition #20057, part 24e	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	х	
PM10	BAAQMD condition #20057, part 21	Y	·	72 lb/ calendar day	BAAQMD condition #20057, parts 24e	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	Х	
PM10	BAAQMD condition #20057, part 21	Y		13.1 tons/ calendar year	BAAQMD condition #20057, part 24e	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	х	
POC	BAAQMD condition #20057, part 18.4	Y		2 ppmv @ 15% O2, dry, except during turbine startup or shutdown	BAAQMD condition #20057, part 24d	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	Х	
POC	BAAQMD condition #20057, part 21	Y		30.0 lb/calendar day	BAAQMD condition #20057, part 24d	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	Х	
POC	BAAQMD condition #20057, part 21	Y		4.9 ton/ calendar year	BAAQMD condition #20057, part 24d	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	х	

Type of	Citation of	FE	Future	I ímit	Monitoring	Monitoring	Monitoring	Comp	liance
Limit	Limit	Y/N	Effective Date	Límit	Requirement Citation	Frequency (P/C/N)	Туре	Yes	No
NH3	BAAQMD condition #20057, part 18.2	N		10ppmv @15% O2, dry, except during turbine startup or shutdown	BAAQMD condition #20057, parts 18.2 and 23b	С	Calculation based on source test and NH3 to NOx ratio at inlet to SCR	х	
NH3	BAAQMD condition #20057, part 18.2	N		10ppmv @15% O2, dry, except during turbine startup or shutdown	BAAQMD condition #20057, part 24b	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	Х	
Heat input limit	BAAQMD condition #20057, part 22	Y		500 MMBTU/hr (HHV),	BAAQMD condition #20057, part 23d	С	Fuel meter,	х	
Heat input limit	BAAQMD condition #20057, part 22	Y		500 MMBTU/hr (HHV),	BAAQMD condition #20057, part 23d	P/M	Fuel composition analysis	х	
Heat input limit	BAAQMD condition #20057, part 22	Y		500 MMBTU/hr (HHV)	BAAQMD condition #20057, part 24g	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	х	
Heat input limit	BAAQMD condition #20057, part 22	Y		12,000 MMBTU/day (HHV)	BAAQMD condition #20057, part 23d	С	Fuel meter, calculations	х	
Heat input limit	BAAQMD condition #20057, part 22	Y		12,000 MMBTU/day (HHV)	BAAQMD condition #20057, part 31g	P/Q	Fuel composition analysis	Х	
Heat input limit	BAAQMD condition #20057, part 22	Y	-	4,380,000 MMBTU/yr	BAAQMD condition #20057, part 23d	С	Fuel meter, calculations	Х	:
Heat input limit	BAAQMD condition #20057, part 22	Y		4,380,000 MMBTU/yr	BAAQMD condition #20057, part 31g	P/Q	Fuel composition analysis	х	

Type of	Citation of	FE	Future Effective	W tourte	Monitoring	Monitoring Frequency	Monitoring	Comp	liancé
Limit	Limit	Y/N	Y/N Date	Limit	Requirement Citation	(P/C/N)	Туре	Yes	No
MW	N/A			None	BAAQMD condition #20057, part 24h	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	Х	
Exhaust Gas temperature	N/A			None	BAAQMD condition #20057, part 24j	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	Х	
Stack gas flow	N/A			None	BAAQMD condition #20057, part 24i	P/A	Source test every 8000 hrs or every 3 yrs, whichever comes first	Х	
NH3 injection rate	N/A			None	BAAQMD condition #20057, part 24k, 18.2	P/A	Source test District approved correct ammonia slip calculation and correction factor determined by source test with source. Test every 8,000 hrs or every 3 yrs, Whichever comes first	Х	
Start-up Period	BAAQMD Condition #20057 part		·	60 minutes per start-up	BAAQMD condition #2057, part 31(b)	P/E	Records	х	
Shutdown Period	BAAQMD Condition #20057 part 20			30 minutes per shutdown	BAAQMD condition #2057, part 31(b)	P/A	Records	х	
Fuel Sulfur Content	40 CFR 60.333(b)			0.8 percent by weight (8000ppmw) sulfur	40CRFR 60.334(h)(1)	P	Fuel Sulfur Content Testing	х	

## Table VII - B Applicable Limits and Compliance Monitoring Requirements S-2 – DIESEL FIREWATER PUMP

Type of	Citation of	FE	Future		Monitoring	Monitoring	Monitoring	Compliance	
Limit	Limit	Y/N	Effective Date	Limit	Requirement Citation	Frequency (P/C/N)	Туре	Yes	No
SO2	BAAQMD	N		GLC <sup>1</sup> of 0.5	,	P/E	Fuel	Х	
	9-1-301		ļ	ppm for 3 min			certification		
	BAAQMD			or 0.25 ppm for			by vendor		
				60 min or 0.05					
				ppm for 24			İ		
	1			hours					
	BAAQMD	Y		Sulfur content		P/E	Fuel	X	
	9-1-304			of fuel <0.5%			certification		
	<u> </u>			by weight			by vendor		
Opacity	SIP	Y	 	<ringelmann< td=""><td>·</td><td>N</td><td>}</td><td>X</td><td></td></ringelmann<>	·	N	}	X	
	Regulation		ļ	No. 2 for more					
	6-302			than 3 min/hr					
Opacity	BAAQMD	N		<ringelmann< td=""><td></td><td>N</td><td> </td><td>X</td><td></td></ringelmann<>		N		X	
	Regulation		i.	No. 2 for more			·		
	6-1-302			than 3 min/hr					
FP	SIP	Y	1	0.15 grain/dscf		N		Х	
	Regulation								
	6-310						<u> </u>		
FP	BAAQMD	N		0.15 grain/dscf		N		Х	
	Regulation			:					
<u></u>	6-1-310		- 						
Hours of	BAAQMD	Y	1	Emergency use	BAAQMD 9-8-530	С	Hour meter,	X	
operation	9-8-330.1			for an	BAAQMD	P/E	recordkeeping		
	BAAQMD		<b>.</b>	unlimited	Condition #22850		i		
	Condition		,	number of	Part 3				
	#22850			hours					
	Part 1								
Hours of	BAAQMD	Y		Reliability-	BAAQMD	С	Hour meter,	Х	
operation	9-8-330.2			related activities	Regulation 9-8-530	P/E	recordkeeping		
	BAAQMD		1	not to exceed 50	BAAQMD				
	Condition		1	hours in any	Condition #22850		<u> </u>		
	#22850			consecutive 12-	Part 3				
<b></b>	Part 1		<u>:</u>	month period			<u> </u>		

## Table VII - C Applicable Limits and Compliance Monitoring Requirements S-3 – COOLING TOWER

Type of	Citation of	FE	Future	Limit	Monitoring	Monitoring	Monitoring Type	Compliance	
Limit	Limit	Y/N	Effective Date		Requirement Citation	Frequency (P/C/N)		Yes	No
Opacity	BAAQMD	N		>=Ringelmann		N		Х	
	Regulation		;	1 for no more					
	6-1-301			than 3 min/hr		(			
Opacity	SIP	Y		>=Ringelmann		N	-	x	
	Regulation			1 for no more					
	6-301		L	than 3 min/hr					
Particulate	BAAQMD	N		0.15 grains per		N		Х	
Weight	Regulation			dscf					ļ
	6-1-310				•				İ
Particulate	SIP	Y		0.15 grains per		N		Х	
Weight	Regulation			dscf					
	6-310			;					
Particulate	BAAQMD	Y		40 lb/hr	N	N		X	
Weight	Regulation								
	6-1-311								
Particulate	SIP	Y		40 lb/hr	N	N		X	
Weight	Regulation						-		
	6-311			:					